Stories of Change:

Coastal Louisiana Tribal Communities' Experiences of a Transforming Environment



Grand Bayou Village

Grand Caillou/Dulac Band of the Biloxi-Chitimacha Confederation of Muskogees Isle de Jean Charles Band of the Biloxi-Chitimacha Confederation of Muskogees Pointe-au-Chien Indian Tribe January 22-27, 2012

Workshop Report Input into the National Climate Assessment



Table of Contents

Background	4
Workshop Goals	4
Workshop Activities	5
Input into the National Climate Assessment	6
The Four Participating Tribal Communities	6
Our Environmental, Cultural and Economic Resource Concerns	10
Setting the Scene for the National Climate Assessment	11
What we care about	12
Information and Action Needs	19
Next Steps for Action	20
Appendix A: Tribal Communities' Websites	22
Appendix B: Information about Programs in Report	23
Appendix C: Participant and Input Synthesis List	24

Background

Southern Coastal Louisiana Tribal communities, including Grand Bayou Village, Grand Caillou/Dulac, Isle de Jean Charles and Pointe-au-Chien Indian Tribe have initiated a collaborative undertaking in which we gather together to share knowledge, support, cultural connectivity and adaption strategies to the tremendous environmental pressures and changes we currently face. Our communities have been interested in other regions experiencing coastal loss due to erosion and climate change for many years and developed connections with Alaskan communities, which have expanded and been enriched over the past seven years with educational exchanges and co-learning. This past October we gathered together with other natives from Minnesota and Alaska to weave traditional baskets as we strengthened our fellowship and learned from each other about ethnobotany in our specific regions, common problems we face (e.g., oil extraction and environmental devastation) and adaptation strategies.

Most recently, our collaborative hosted a week-long event in Pointe-au-Chien, Louisiana from January 22-27, 2012, in which a multitude of interrelated activities were coordinated by Kristina Peterson, Senior Research Associate at the University of New Orleans Center for Hazards Assessment, Response and Technology (UNO-CHART). The specific activities included:

- *Bringing members from local Tribal communities, the National Center for Atmospheric Research (NCAR) and Significant Opportunities in Atmospheric Research and Science (SOARS) Team, local USDA-Natural Resources and Conservation Services (USDA-NRCS), Wisconsin's Tribal Conservation and Advisory Council (WTCAC), Barataria-Terrebonne National Estuary Program (BTNEP) and CHART together to view resource concerns and environmental issues in the bayou and local communities.
- An introduction to resources and services provided by the USDA-NRCS and exploring possibilities of forming a Louisiana Tribal Conservation Advisory Council.
- An opportunity for coastal Louisiana tribes to provide input into the U.S. National Climate Assessment (NCA).
- To engage in the review process of Louisiana's 50-year State Coastal Plan.

Workshop Goals

Multiple goals include the continuing work of building trust and knowledge between communities (as the collaborative expands), continuing to develop the understanding of agency resources that can be used to address the priority needs of our communities, to give mutual support of neighboring bayou communities and plan cooperative actions. Woven within the discussions was the on-going opportunity for knowledge exchange between citizen scientists, outside scientists and researchers and local government officials and agencies. For example, what was perceived to be a levee by the participating outsiders is not a levee, but rather the spoils from the dug drainage channel that is acting in an adverse way by holding in water during storms. Throughout the week, we, as local, citizen scientists contributed traditional ecological knowledge (TEK) and local knowledge, which is only understood by living in our communities and experiencing what we experience on a daily basis over a lifetime.

¹ Funds for the workshop were kindly provided by the University Corporation for Atmospheric Research (UCAR).

The workshop goals included the following:

- USDA-Natural Resources Conservation Service and Tribal Conservation Advisory Council
 - ▶ Discuss formation of Louisiana Tribal Conservation Advisory Council
 - Learn about applicable programs and forms of organizing that have been used by other tribes and the Southeast region multi-state council
 - Establish relationship between NRCS district conservationists and Tribal communities
 - ▶ Evaluate resource concerns from outside perspective
 - Discuss agricultural producer eligibility
 - ▶ Sign up eligible farming operations for the Environmental Quality Incentives Program
 - Get sister agencies together for a future meeting
- ❖ National Center for Atmospheric Research and Significant Opportunities in Atmospheric Research and Science
 - ▶ Introduce NCAR/SOARS to the communities
 - WTCAC identifies issues for a 5 student Protégés Research Team from NCAR/ SOARS that cannot currently be addressed with NRCS practices
 - Students are under the tutelage of UNO-CHART to be trained in participatory action research (PAR) methodologies so that they can engage in a participatory manner with the communities to address identified issues
 - Provide role models for local youth to consider environmental science studies
- National Climate Assessment
 - ▶ Provide information about the NCA
 - Listen to stories of the communities' experiences of and impacts related to climate and other environmental changes
 - Explore the issues the Tribal communities are facing on a daily basis that threaten their livelihoods, ways of life and cultural existence.
 - ▶ The communities reflect on their stories
 - Compile the stories of the four communities and submit as input into the NCA
- * Additional Partnership Development with Local Organizations and Resources
 - Barataria-Terrebonne National Estuary Program (BTNEP): Enhance collaboration with BTNEP - a partnership of government, business, scientists, conservation organizations, agricultural interests and individuals for the preservation, protection and restoration of the Barataria-Terrebonne National Estuary in southeast Louisiana - to assist in addressing identified projects, including staff assistance, small grants and research and program materials
 - ▶ South Louisiana Wetlands Discovery Center (SLWDC): Build partnership with SLWDC a local, youth-gaining organization that provides an educational resource that utilizes the ecology of the Gulf Coast as the focus of experiential learning and expands existing resources in science, mathematics and technology to involve youth in actively engaging in the issues of our coast and work to conserve and preserve our wetlands

Workshop Activities

To accomplish the workshop goals, the week-long events, gatherings and discussions included the following:

*We took NCAR, SOARS and WTCAC representatives on a boat tour of Pointe-au-Chien to give the group a tangible idea of the region and help the WTCAC representatives understand the resources that are available through UCAR/NCAR to help develop any potential project with USDA and NRCS.

- We gave WTCAC and USDA-NRCS a boat tour of Grand Bayou Village and Pointe-au-Chien and a driving tour of Isle de Jean Charles to assess environmental issues and resource concerns and talk with Tribal members about their farming operations.
- *Gathering together to collaboratively create a framework of issues we are facing, such as land loss, coastal erosion, subsidence, stronger hurricanes, loss of subsistence ways of life, and our traditional ecological knowledge failing us because the surrounding environment is changing at such a rapid pace. These discussions and engagement continued the work of re-invigoration of our communities' life-ways and cultural heritage.



Photo courtesy of Julie Maldonado

Input into the National Climate Assessment

Throughout the week, we embedded our conversations in how we are experiencing climate, weather and other environmental changes, the issue of environmental displacement and cultural genocide, the threat to community and cultural continuity if not in place and responding to these issues. We received information about the National Climate Assessment and talked about what climate change means for our Tribal communities. There were lengthy group discussions, during which time our Tribal community members shared their stories and experiences and provided an historical narrative of non-western life-ways.

With such a diversity of issues faced, our Tribal members' stories directly feed into several NCA topics, including:

- * Sectors: (1) Agriculture; (2) Ecosystems and biodiversity; (3) Human health
- Sectoral cross-cuts: (1) Impacts of climate change on tribal, indigenous, and native lands and resources; (2) Land use and land cover change; and (3) Rural communities and development
- * Regions: Southeast and Caribbean
- * Biogeographical cross-cuts: Gulf Coast

The Four Participating Tribal Communities

❖ Grand Bayou Village

Grand Bayou Village is located in Plaquemines Parish; we have lived in our village for at least 300 years, but have been in the region for millennia. We are Atakapa-Ishak, also mixture of Acadian French and other Indian tribes. The peoples of Grand Bayou live in concert with nature; and continue to enjoy the life-cycles and seasons of a subsistent existence. We have made our homes here; raised our families along the bayous in the marshes and chieniers long before the first Europeans came to this continent. We lived our lives hidden from the newcomers to this land, minimizing our contact, thus preserving our way of life; a way of life that persists in the twenty-first century.

Our history differs little to the history of other Indian peoples where our land is concerned. The lands and waters that we depend on for our lives, our culture, our heritage, have been abused, broken and poisoned. This abuse is extended to other life forms that are also dependent on this ecosystem for survival. We have witnessed the land loss, species change and loss of both flora and fauna; and it is only with this intimate observation and connection as we mimic the ways of nature, that we have managed to adapt, endure and remain.

We are connected to place, way beyond geographic definitions; we believe that The Devine Creator in His infinite wisdom gave us to this place. Life here moves at a different pace; however the world hungers for-faster-bigger-more; therefore the resources in our surrounding lands and waters are being gluttoned away to feed a seemingly unending appetite, with no regard to the negative environmental impacts and the negative impacts to the lives of our peoples. We continue to work today in hopes of reaching mutual understanding and respect to protect our lands and to find ways to heal the earth, to the benefit of "All".

Grand Caillou/Dulac Band of the Biloxi-Chitimacha Confederation of Muskogees

The Indian people of the Grand Caillou/Dulac community are descendants of the early 19th century residents of Bayou Terrebonne and Bayou Little Caillou. Up to the 1830s most of the land along Bayou Little Caillou was considered "public lands" or land owned by the U. S. Congress, but many Indian families can be documented living there before then.

Today, young Indians are now able to get an education, although many fall behind because they need tutoring, coming from illiterate homes. There is no assistance or funding for tutors, or hope of a higher education or training because funds are not given to "unrecognized" tribes. The elders get medical care through a local charity hospital. Living conditions for many of the elders is little improved from the early part of the twentieth century. Their housing is substandard and many don't have utility services because they cannot afford them. Unemployment



Image courtesy of Grand Caillou/Dulac and Isle de Jean Charles website

for the working-age adults is high because of lack of education and training, a result of the days of segregation. Only seasonal work as laborers is available to them, at minimum wage, not nearly enough to support families. The chain of poverty and deprivation continues.

In June 2004, the Grand Caillou Dulac Band of the Biloxi Chitimacha Confederation of Muskogees was officially re-recognized as a tribal community and recognized as an Indian tribe by the State of Louisiana. Federal recognition will bring much needed help in addressing the above problems and others for the Indian people of Grand Caillou/Dulac and all Biloxi-Chitimacha people.

❖ Isle de Jean Charles Band of the Biloxi-Chitimacha Confederation of Muskogees

Isle de Jean Charles in Terrebonne Parish, Louisiana is a narrow ridge of land between Bayou Pointe-aux-Chene and Montegut. The Island is split down the middle: Bayou St. Jean Charles runs through the center of the Island. There is a road on one side. Today there is not enough land to raise any type of livestock or gardens because of saltwater intrusion. This ridge was considered "uninhabitable swamp land" until the State of Louisiana decided to make sales to

private individuals in 1876. It may have been used as a trapping and fishing base before that, but there are no records of permanent residents, and thus no descendants can be traced to this day. Oral history from our ancestors says they moved just to the North of the Island in about 1840.

The Island has been known as an Indian community since its beginning in 1840 and still is today. Every resident of this Island has ancestors from the Biloxi, the Chitimacha, and the Choctaw tribes. Studying the genealogy, there is full evidence of intermarriage in the Island community. But our people have maintained their (mixed) Indian heritage. No matter how much Indian blood an individual possesses, the bottom line in this area is: "if you came from Isle de Jean Charles you were an Indian." Our people have certainly been persecuted and denied equal human rights as Indians. In June 2004, the Isle de Jean Charles Band of the Biloxi-Chitimacha Confederation of Muskogees was officially re-recognized as a tribal community and recognized as an Indian tribe by the State of Louisiana. We continue our fight for federal recognition.

The maps below show the intense loss of land we have experienced. The first map is from around 1954 and the second is from 2010. The two maps are of the exact same area, with the line going diagonally across the middle the road that leads to our island. As you can see, what was land in 1954 has now disappeared into water today.



Map of Isle de Jean Charles, 1950s, courtesy of Albert Naquin



Map of Isle de Jean Charles, 2010, courtesy of Albert Naquin

❖ Pointe-au-Chien Indian Tribe



The Pointe-au-Chien Indian Tribal Community (PACIT) is located in lower Pointe-au-Chien, a traditional village of our ancestors, the Chitimacha. The Pointe-au-Chien Indians are also believed to be decendants of the Acolapissa, Atakapas and Biloxi Indians. The Tribe has approximately 680 members. The Pointe-au-Chien are the caretakers of an area continuously inhabited by indigenous tribes of South Louisiana and descend from tribes historical to Louisiana and the Mississippi River Valley. In June 2004, the Pointe-au-Chien Indian Tribe was officially re-recognized as a tribal community and recognized as an Indian tribe by the State of Louisiana.

Photo courtesy of Julie Maldonado

Historically, Pointe-Au-Chien ancestors were farmers, fishermen and hunters. Unfortunately, the ability to farm today is impaired

because of salt-water intrusion, but individuals continue to maintain personal gardens. Pointe-Au-Chien Indians continue to live off of the land and water by hunting alligators, fishing, and catching shrimp, crabs and oysters.

This small French-speaking tribe continues to comprise a distinct community despite colonization, land loss, lack of status as a federally recognized tribe, exploitation of the land and people and denial of educational opportunities. The perseverance, ability to adapt, humility and cultural knowledge of its people have sustained the Tribe. While the heart of PACIT remains along lower Bayou Pointe-au-Chien, some Tribal members have had to move in order to adapt to salt water intrusion and the rapid land loss in recent years, which can be attributed to the

increased salinization of the water, the reduction of the barrier islands and the lack of fresh water replenishing the soil. These factors leave Pointe-au-Chien vulnerable to flooding. Multiple hurricanes (Andrew, Lili, Katrina, Rita, Gustav and Ike) have caused severe damage to homes in the past fifteen years. Tribal members are adapting to the changing nature of their land by raising their homes, some as high as thirteen feet.

Our Environmental, Cultural and Economic Resource Concerns

Our Tribal communities have many similar and common resource concerns, including subsidence, land sinking and shrinking and sea-level rise. Each community also voiced particular concerns they have, including:

Grand Bayou

- Shoreline erosion near homes
- Debris
- Water under homes and in yard
- Erosion along ridges
- Width of channel
- Food security

"It was pretty here before, now all we have are skeletons."

- Theresa Dardar, Pointe-au-Chien

❖ Grand Caillou/Dulac

- Losing sacred places and burial grounds to lack of protection from storms and government
- Loss of lands and healing plants
- Cost of insuring homes of tribal members on bayous
- Education (specifically college and adult education)



Land erosion, photo courtesy of Randy Gilbertson

❖ Isle de Jean Charles

- ▶ Saltwater intrusion
- ▶ Losing live oaks
- ▶Homes not being restored
- ▶ Have to go very high and strong to stay out there
- Trying to establish industry for community members (e.g., talapia)
- ▶Need money to get land to own
- ▶Community members scattered about
- Need to get plants back so children can learn what they are and elders have them back
- ▶#1: restore our community!!!

❖ Pointe-au-Chien

- ▶ Marsh fragmentation
- Saltwater intrusion
- ▶ Tree loss
- ▶ Loss of bald eagle habitat
- ▶ Ghost Forests

<u>Setting the Scene for the National</u> Climate Assessment

Nikki Crowe from the Fond du Lac Band of Lake Superior Chippewa, Minnesota presented to us about the formation of the Fond du Lac Resource Management's climate change group to provide



Ghost forest, photo courtesy of Julie Maldonado

context on climate change impacts being felt by other Tribal communities and their responses. Some of the issues Nikki discussed that Fond du Lac is facing include:



Image courtesy of Nikki Crowe

- Mortality of moose herds have increased with increasing temperatures
- ▶ Expansion of wild turkeys on reservation
- Warmer temperatures are leading to the decline in trout and change in fish species, with new species taking over
- Changing migration pathways of animals
- Decrease in native plant species
- ➤ Shift of wild rice
- ▶ Higher tree seedling mortality
- ▶ Longer spring wildfire season
- Earthworms on the forest floor

Some positive aspects of shorter winters, such as expectation of increased deer survival, are coupled with negative impacts, like increased risk to vegetation. Ms. Crowe explained that Fond du Lac Resource Management is responding to climate change with specific management plans, however a specific committee has not yet been assigned. They are taking direct action on their lands, including:

- Ozone monitoring
- Monitoring impacts of mining
- Updating emissions inventory
- ▶ Reservation-wide greenhouse gas reductions
- ▶ Focus on natural resources
- ▶ Use of traditional ecological knowledge

Kathy Jacobs, Director of the National Climate Assessment gave a presentation that provided us with information about the NCA. She highlighted key aspects that directly pertain to our Tribal communities, including sectoral cross-cuts - impacts of climate change on tribal, indigenous, and native lands and resources, land use and land cover change and rural communities and development; regions -



photo courtesy of Kelly Bagwell

Southeast and Caribbean; and biogeographical cross-cuts - Gulf Coast.

From our conversations, we would like to inform you about what our Tribal communities are experiencing related to climate, weather and environmental changes, the impacts we are forced to deal with and the actions we would like to see happen to ensure our cultural survival.

What we care about

"Saving who we are and what we have left." - Nancy Machado, Grand Bayou Village

♦ Land Loss

There used to be more land when we were kids and now the land is going down every day. What was land

before is now covered with water. When there was less water and more land, there were flowers, trees and gardens. When there were more trees, this meant more storm protection and better air quality. Now the air is different. We are concerned about air quality and protection from the wind. As Nancy Machado of Grand Bayou Village explained, "everything is getting wider...There is nothing to stop the gas, fumes, storms. Now flowers, grass are all gone. Now there is only water everywhere." Albert Naquin described how Isle de Jean Charles was five miles wide when he was a kid and now it is only a guarter-mile wide.

Our bayous were paradise for kids because they love the water, fishing, swimming, canoeing and connecting with elders. But that paradise is changing. Folks from Grand Bayou used to go out and tie up to the chenieres and go swimming, but now there is only old tree stumps. The kids can't play outside because there is no land.

While out on the boat in Pointe-au-Chien, Donald and Theresa Dardar showed our visitors where their grandparents once lived and how they would go through the forest to get to their grandparents' house. Now there is just open marsh, with eroding edges and scattered ghost trees. Mrs. Dardar described how when she was growing up, her family would take the boat down the bayou and she could pull the grass on either side of the boat with her hands. Now it is just wide open canals.

"I used to get lost walking in the trees behind my house. Now there's nothing. Bays and bayous were miles from home, now they're all around."

- Donald Dardar, Pointe-au-Chien

We are faced with a multitude of actors that impact our land loss and create obstacles to force companies to fill in unused channels. For example, there are about seven different companies in Pointe-au-Chien involved with channel construction, including for pipelines and boundary cuts.



When first cut, photo courtesy of Jerry Thompson



After effect, photo courtesy of Jerry Thompson

"When we were kids we had more land. Now our land is going down little by little. We had our own garden with fig trees, peach trees, bell peppers and we would distribute to our family and neighbors."

- Mary Bartholomew, Grand Bayou Village

♦ Species Change

Coupled with land loss, our Tribal communities are experiencing species change on our lands and in our water. Whereas before we sustained ourselves by working on the water, now, just one generation later, we are affected by the land loss and species change. For example, we used to trap muskrats near our homes. But now, the muskrats are gone and there is no more trapping nearby. Not being able to trap at home has been a major change of lifestyle for our communities, as we have to travel further and further away to trap.

♦ Loss of Traditional and Medicinal Plants

A major concern for our Tribal communities is the loss of many of our plants. The majority of our trees are dying or dead, our herbs for healing are becoming extinct to us and our fruit and

vegetable growth is being affected. The saltwater intrusion depletes the nitrogen and other essential nutrients for plant growth. Chief Albert explained that the plants his community used for healing are gone and that everything they did back in 1950 is now gone. Isle de Jean Charles only has one cactus left used for healing.

"We can't grow gardens, cattle, our healing herbs are gone, everything's gone except living." - Chief Albert Naquin, Isle de Jean Charles



Last community garden, Pointe-au-Chien, photo courtesy of Randy Gilbertson

In Pointe-au-Chien, there are a couple elderberry left, but they are disappearing and there are hardly any hackberry trees left, which means that there are no more robins anymore. Although we still have plantains, Tropical Storm Lee in August 2011 killed some, so they are threatened by increased flooding. There is one significant garden left in our community, maintained by an elder and her sons. The garden is used to provide our community with fresh vegetables. However, this too is under threat, as the garden was flooded with two feet of water after Tropical Storm Lee.

♦ Hotter Temperatures

Our Tribal communities are experiencing the impacts of a hotter climate. Many agree that it stays warmer longer; the winters are short and there are less cold days, which affects the plant life. "Now that it is hotter, it changes how we live." - Rosina Philippe, Grand Bayou Village

The increase in temperatures is prohibiting the plants and trees from entering their customary dormant season necessary for good production and plant health over all.

The increase in temperatures has affected our social interactions and sense of community. We used to leave our windows open for a natural cooling process and spend a lot of our time outside. Now, most stay inside with air conditioning and keep the windows shut. We feel it is important to be able to go outside, have your windows open and feel the breeze through the house. Now that we are inside more, there is less chance to be outside together and talk to

"When I was a young man, I could stay outside in the summertime. Now, where there is a south wind, there is water in the yard and you can't go outside."

- Raymond Reyes, Grand Bayou Village

each other, and with the windows shut, we can no longer wave to each other. We have lost the fresh air in our houses and no longer have the windows open to let germs out during the Fall and Spring.

❖ Pollution

In addition to our contaminated air, our bayous are polluted, which impacts not only our health, but also our social dynamics and community life. We remember when you used to be able to



Photo courtesy of Randy Gilbertson

swim in the bayou. However, when Nancy Machado's (Grand Bayou Village) children visited a couple years ago "they couldn't swim in the bayou because of pollution." Due to the chemicals from dispersants and oil spills and post-storm debris that the government doesn't clean up after a storm, the bayou is contaminated. Six years ago, the local government told Pointe-au-Chien that they would come to clean out the bayou. However, because the bayou is at the border of Terrebonne and Lafourche Parishes, each parish puts responsibility on the other so nothing gets done. Lack of action by Plaquemines Parish, where Grand Bayou is located, is also the norm, adding to polluted waters.

Contamination and Poor Health

A major problem our communities are facing is that we don't know what we're eating and drinking. Before, when everything was shared, we ate from the land and traded resources. For example, one family might trade shrimp for another families' fresh vegetables from their garden. Everybody had a garden in their backyard. Now, with the loss of home gardens, we are forced to buy more food from the grocery store and instead of being able to share, we only have enough money to buy for our own household. Consuming different foods than before is also affecting us. Not only do we eat more processed foods from the grocery story, but we also replace more seafood for vegetables, and now that has been contaminated.

In the past, we used herbs and traditional remedies to maintain our health. But now, the plants are no longer here and more people are sick and we are forced to go to outside doctors with increasing bills and fees. Our people also go because our illnesses are different than before. We are exposed to chemicals and carcinogens and encroaching industries around our communities

contaminating the air we breathe. With the continued lack of oversight, our drinking water is contaminated and we do not even know everything that is being put in it. We used to use a big cistern to collect rainwater to drink, eat fresh food and live healthy lives. Now when you turn the tap water on it smells like chlorine and bleach. We don't know if the EPA monitors what is discharged into the atmosphere and water on a regular basis. They give you a report on water quality that is so technical that no one can really understand what it means for our health, and they do this as a way of covering themselves, while we

"I'm concerned because my grandson is going off to college. He's a bayou boy. He loves to go swimming and shrimping with his uncles. But what is he going to have to come back to?"

- Nancy Machado, Grand Bayou

have no idea what we are really drinking and eating.

Before, longevity was a part of our heritage, but now we are the sacrificed communities and our people are dying younger because of new diseases we never had before. We used to use home remedies and we need to get back to that. That is why we want to plant our medicinal plants again, maybe in raised-bed gardens so they are protected from saltwater intrusion.



Grand Bayou shrimpers, photo courtesy of Julie Maldonado

♦ Livelihood Impacts

Hotter temperatures have also impacted our livelihoods. When it was cooler, the fishers and shrimpers could stay out longer and go further because what they caught would stay cool. Now we have to come in a lot sooner because of refrigeration concerns in the heat. We need to keep the shrimp on ice and cold. Without a cooling system, we can no longer stay out multiple days.

We are also impacted by fishing regulations. Additionally, we are dealing with the increased cost of diesel for the boats combined with the decrease price of the products we catch, such as shrimp. Furthermore, with the lack of freshwater, we have to travel further to our oyster beds, meaning even more diesel used and higher costs. As Maxie Machado of Grand Bayou Village explained,

with the lost value of shrimping and changes faced, about 80% of the people from our community have had to leave to find work elsewhere. Young adults are moving away because the income used to sustain their families is no longer there.

The combination of increasing temperatures, loss of land, the economic situation and government regulations have impacted our subsistence-based communities lives and livelihoods, forcing us into survival mode. And, whereas before we thrived on what we caught and enjoyed our livelihoods, now, with the high price of fuel and low price of shrimp, we don't even look forward to our catch.

Oppressed but Still Here

Interwoven with our many environmental challenges, we have faced discrimination against for generations. As Native Americans, historically speaking, we have tended to be a forgotten people. The government tried to exile us and take our lands all under the disquise of peace for our people. Now, government again is deciding who is the worthy of saving and instead of protecting what a people gives to the care of the Earth is looking at what they can gain monetarily in the form of tax revenue and industry in making their decisions.

"We are historically fishermen and trappers. We have maintained this life well for hundreds of years, probably longer. Now our waters are contaminated by the industries that increase Global Warming and the layer of pollution in the atmosphere, which brings with it an increase in storms that has led to salt water intrusion of our lands. This is also destroying the vegetation that has been plentiful and abundant for generations, destroying the opportunity for us to be a self-supporting people and to share our bounty with the rest of the planet." - Kelly Bagwell, Isle de Jean Charles

Two of our biggest questions are: "Where is our government" and "What is the government doing?" The same week as the workshop, we questioned how much the government is listening

to us when we participated in a public hearing held about the recent release of the Draft 2012 50-year Coastal Louisiana Master Plan that leaves our communities out, completely discounting our presence, rights and voice. As Theresa Dardar of Pointe-au-Chien asked at the hearing, "How do we know that our comments will be considered for real and not just to fit into your guidelines?" One of the major obstacles we face is the lack of help and support from local elected officials. Most recently, despite being asked to do work for the last Census, our communities were not included in the Tribal Census Map. We face obstacle after obstacle to prove that we are here and exist. We need to make sure they know we are here.

Lack of Input Into Mitigation Plans

While levees are one of the major mitigation actions occurring in our region, we did not get to provide input about where it would be most effective to put the levees. As Albert Naquin, Chief of the Isle de Jean Charles Tribe, described, "They mitigate what they want, they just decide." Rosina Philippe of Grand Bayou Village explained that the Army Corps of Engineers proposed and backed a plan for a floodwall project that would basically cut out half of Plaguemines Parish, where Grand Bayou Village is located. Even though many local residents were against the plan, the Corps did not listen to them. As Ms. Philippe stated, "The project put us in a sacrificial zone." The levee was a significant turning point from the community being self-sufficient to being



Example of levee that was put in without community input. It runs north-south instead of east-west and does not protect our community. Photo courtesy of Julie Maldonado

dependent on outside resources. The dirt berm is creating a similar dilemma for the Pointe-au-Chien community because the way the canal was dug for the levee, the dirt from behind our houses is falling in, decreasing the minimal land we have left behind our homes.

Uniqueness of a Place and Its People

The shared resources make our communities unique and different than other places. As Nancy Machado (Grand Bayou Village) explained, "Everybody just shares everything." Mary Bartholomew told a story about how at the end of shrimping season "a 'gang' of us sit, peel, and clean shrimp to store for winter." In Grand Bayou Village, Mary described how "My house is your house. Everybody shares."

"Everybody knows everybody. You can stop at the first house and ask where so and so lives. We don't lock our doors. We trust everyone here. It's like nowhere else." - Theresa Dardar, Pointe-au-Chien



Theresa Dardar, Pointe-au-Chien, photo courtey of Nikki Crowe

However, being able to share resources is starting to change. Before, everyone would share seafood and vegetables and live off the land. If one household had more vegetables and one household had more seafood, they would trade. For people who didn't have chickens, they would get eggs from their neighbors. Whereas before it was our custom to share our harvest with others in the community, now, we barely have enough for ourselves or not enough at all resulting in our people having to purchase items or go without them entirely. Before, we used to build our houses and boats together. Now, with people having to leave the

community, we are forced to hire contractors. This isn't just about food, houses and boats.

Losing shared resources changes the community dynamics and sense of community when we can no longer gather what we did before because it is not viable in the environment. It is the little changes that add up. As Ms. Philippe described, "It starts with the food and moves to the next thing and the next thing." Before you know it, the sense of sharing is lost.

As Kristina Peterson, UNO-CHART described, "When you go to our communities, you see that the children belong to the whole community. I don't want to

see that gone."

What's Missing Today?

Today, our communities are experiencing the loss of many important facets of our cultural lives and livelihoods and surrounding environment. Our seafood is gone. Pigs, hogs,

cattle, deer, marsh hens, ducks, rabbits and horses in our backyard are all gone. The gardens that once flourished behind our houses are no longer there. The trees where we wandered and

"I've been many places and there's no place where you can wake up in the morning and smell the plants and trees and waters like here. It smells divine. It's the smell of our homelands!" - Shirell Parfait-Dardar, Grand Caillou-Dulac

got lost in are no longer there. The muskrats we trapped for food and income and spent hours upon hours skinning together in shared company are no longer there. The land is no longer there. Now it is open water.

"Anytime I have come anywhere close to here, I've known this is where I want to be."

- Kelly Bagwell, Isle de Jean

Charles

We used to walk to visit with our grandparents. Now that's gone as the children have moved further away for work. The younger people are gone and the land is getting smaller.

❖ The Tipping Point

We have experienced a tremendous loss of people from our communities. As Ms. Dardar (Pointe-au-Chien) expressed, "Pretty soon we are going to be an elderly community." For Grand Caillou/Dulac, the only option our people have had is to relocate. Yet, as Acting Chief Shirell Parfait-Dardar has realized, "doing so individually will annihilate the beauty of what it is to be an American Indian residing on the Gulf Coast." We should be focusing on coastal restoration and the preservation of our culture, heritage and traditions.

In the case of Grand Bayou Village, the government made offers to buy us out. But we want to keep our land no matter what. Politicians would like us to relocate so they can build up the bayou and develop it for condominiums and fishing camps, as the community is currently located between two developments with summer fishing camps. Relocation was the first word that we heard from municipal officials. We are keeping our community and we want to keep our land. For us, the bayou has always been there, has always been home. Yet, in one generation we have lost so much. Before, there was higher ground to shelter boats during storms. Now, what used to be our safe harbors are no longer safe harbors. We are forced to take refuge behind toxic dumps. Yet, despite shared resources being lost, we have still held together communally in times of danger. For example, during Katrina, Grand Bayou folks evacuated together, tying our boats up behind a big hill.

For Isle de Jean Charles, it is hard to think of it still as a community. It is now mostly older folks and grandkids, as about 95% of people had to move away for work. Although the children on the island still share ties with family and the land, they have a good sense that the land is disappearing and it might not be there when they grow up. Chief Albert is fighting to get the community back together, but needs funding. As he explained, "People want to come back to the community. We have to come together to make sure the land belongs to us while we move to a safe location. The goal is to relocate the community without selling the land."

Adapting to a Changing Environment

We are facing many challenges and have created our own means to adapt. For example, we are experimenting with alternative farming methods, such as raised-bed gardens, and we have been planting trees using consertainer baskets to start tree growth and utilize seed exchange.



Chief Albert, Isle de Jean Charles, photo courtesy of Julie Maldonado

However, other means of adaptation have been necessary, but less positive. For example, with hotter temperatures, we now stay inside more and use air conditioning and get cooling systems for our boats. With the inundation of saltwater, we now travel further to oyster. We eat more seafood and less vegetables with the disappearance of our gardens. We also now freeze more of our seafood and prepare and freeze our vegetables to keep better for the periods we don't have them available.





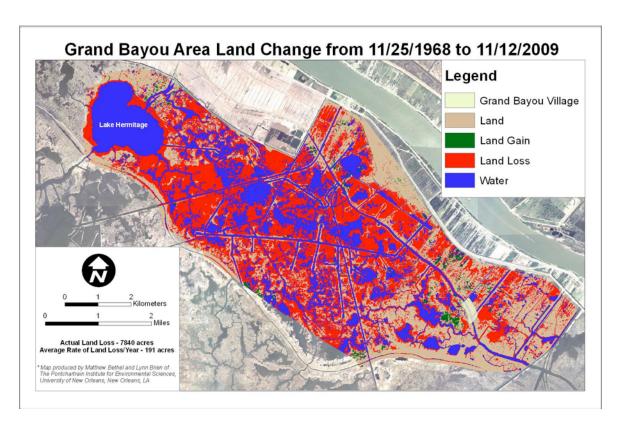
Consertainer baskets in Grand Bayou, photos courtesy of Rosina Philippe

Key Messages

Above all, locally-informed action that includes people's traditional ecological knowledge is crucial to saving what we have left and restoring what we have lost. The authorities need to

listen to local people, receive our input and take action that includes us and is done with us. Above all else, we need to protect our communities. We want to spread the word and tell government agencies about our needs and projects to get started.

"Our main goal is to preserve our land, to try and restore our lands to what they were before. We would like to be able to clean up our yards, grow flowers again." - Mary Bartholomew, Grand Bayou Village



This map was among those created by using Remote Sensing image processing procedures that were developed and applied to detail land change in the study area at time intervals from 1968 to 2009. Scientific datasets, such as was used to produce this map, were integrated with the Grand Bayou community's traditional ecological knowledge for this project to assess the impacts of current and historical ecosystem change to community viability. Courtesy of Matthew Bethel.

Information and Action Needs

While we would like our traditional knowledge incorporated into any and all decisions made about us and for us, we also have specific information needs for which we are reaching out. We need to know what we can plant that will survive with the changing "The government needs to mandate that oil companies close up unused channels."

- Gigi Ancar, Grand Bayou

conditions. A major concern for us is the loss of many of our plants and wanting to know how to get them back. We want to know exactly what we are losing because it is important to know what needs to be preserved. Also, with the change in fresh and saltwater in our areas, we would like to study the different fish coming into our waters.



Grand Bayou residents voicing the need for action, photo courtesy of Julie Maldonado

We would like to hear from the EPA about what's in our bayou water. You cannot just do study after study and not share them with the community or look for some action steps without our input.

Bennie Ancar (Grand Bayou) explained that bald eagle protection "should be of concern to state and local officials and their protection could be used as an indicator of wetland health."

Some of the specific needs we have include bulkheading for protection and land erosion, self

sufficiency and coordination with other coastal communities. We want to save what we had and begin restoring what we lost. We need raised-bed gardens so we can once again grow vegetables despite flooding and saltwater intrusion, we need to save perennial seeds because our plants that go dormant are coming up too soon with increased temperatures, we would like to collect seeds from our region to grow seedlings at the local Plant Material Center for returned transplanting.

Instead of just Wildlife and Fisheries and the Corps of Engineers deciding, we need to have our input included on where levees go to be able to save more land. We will no longer be the sacrificial zone. Non-structural mitigation measures should be targeted to our communities to save our knowledge. Please include our traditional ecological knowledge and ask us to be coscientists and co-managers.

"The Corps of Engineers needs to care." - Bennie Ancar, Grand Bayou Village

Next Steps for Action

The main priorities we decided need to be pursued include:

- ▶ Community restoration
- Home restoration and land restoration
- ► Handicap accessible boat landing for emergency services evacuation (Grand Bayou) and community center (Pointe-au-Chien)
- Oyster bed restoration
- Cooling facility for shrimp, oysters, etc.
- Culture resource (mounds) protection
- Raised-bed gardens
- Hanging gardens
- Straw bale gardens
- Restoration through the Coastal Wetlands Planning, Protection and Restoration Act

Some additional ideas we developed during the workshop to pursue include:

- ▶ Trees from the Soil and Water Conservation District
- ▶ Soil and Water Conservation District vegetable plantings
- Access points
- ▶ Seed exchange
- ▶ Pilot Projects, such as oyster reef construction
- Hesco bastion consertainer baskets
- Oyster and crawfish farming considered as farming according to USDA-NRCS
- > Tribal college extension-board and online classes
- ▶ Hoop Houses



Acting Chief Shirell Parfait-Dardar, Grand Caillou/Dulac, photo courtesy of Julie Maldonado

Based off of these ideas, we figured out the best steps for immediate action that we can pursue now, including:

- •Get established as a farmer with the Farm Service Agency.
- ▶Work with NRCS to establish a Louisiana Tribal Conservation Advisory Council.
- ▶Co-op agriculture with the Soil and Water Conservation District.
- ►Work with the Plant Materials Center and the Barataria-Terrebonne National Estuary Program (BTNEP) to identify and gather native cultural

plants, translate names from French to English and look at ways to grow plants in current soil conditions.

- ▶ Seed exchange between communities to spread plants that aren't in certain areas to others. Approach Seedsavers about help with this. The Plant Materials Center can be used to propagate plants.
- Approach Rural Development agency for help with handicap accessible boat ramp.
- Invite other USDA Agencies to a Community Meeting and a tour of the communities.
- ▶ Create a Conservation Plan with NRCS for what can be done in 3–5 years, 5–10 years, etc.
- Develop projects for student activities with SOARS, such as research sources for plants and seeds, working with the Plant Materials Center and BTNEP to increase cultural plants, community gardens, conservation plans, and developing a staged restoration project for Grand Bayou.

All of these ideas and action steps will be further developed by the four participating tribes, along with USDA-NRCS, WTCAC and UNO-CHART, through the creation of a living strategic plan focused on "Community-based Coastal Community Restoration."

"It is a battle, but this is well worth saving." -Kelly Bagwell, Isle de Jean Charles

Our collaboration will continue to move forward and progress towards both social and environmental justice. We will continue to rebuild our communities and bring back our traditions by holding events like a beading workshop with other Tribal communities, during which time we will share traditional ways to bead and learn from each other about extractive industries encroaching on our communities, we will pursue further interaction with the USDA and sister agencies for our coastal restoration and livelihood efforts and we will continue to work towards healing the Gulf and its people. Our land, water, plants, animals and people are interwoven with each other and we will not stop until we have restored our environment and communities.

As Acting Chief Shirell reminded people when we recently spoke our minds against the Coastal Louisiana Master Plan that is leaving us out:

"Treat the earth well. We do not inherit it from our ancestors, we borrow it from our children." - an American Indian proverb

Thank you for listening to our call.



Appendix A: Tribal Communities' Websites

For further information about our Tribal communities, please visit:

Grand Caillou/Dulac: http://www.biloxi-chitimacha.com/grand_caillou_dulac.htm

Isle de Jean Charles: http://www.biloxi-chitimacha.com/isle_de_jean_charles.htm

Pointe-au-Chien Indian Tribe: http://pactribe.tripod.com/

Appendix B: Information about Programs in Report

Barataria-Terrebonne National Estuary Program (BTNEP)

We are a partnership of government, business, scientists, conservation organizations, agricultural interests, and individuals for the preservation, protection, and restoration of the Barataria-Terrebonne National Estuary in southeast Louisiana. For more information, go to www.btnep.org/

Natural Resources Conservation Service (NRCS)

NRCS collaborates with landowners through conservation planning and assistance designed to benefit the soil, water, air, plants, and animals. These efforts are designed to enhance productive lands and healthy ecosystems. NRCS works at the local level in field offices in USDA Service Centers. For more information, go to www.nrcs.usda.gov

Tribal Conservation Advisory Council (TCAC)

TCAC establishes a one-on-one relationship between tribes and NRCS in which every tribe has an equal voice to educate agencies about conservation practices and communicate needs, plans and priorities.

Representatives from Wisconsin's Tribal Conservation Advisory Council (WTCAC), the first such council formed in the country, were brought here as an example to local tribes. Some of the roles of the WTCAC are:

- to advise USDA and NRCS on better ways to meet tribal needs
- to identify natural resource issues affecting tribal lands or ways of life
- to communicate tribal conservation needs to legislators
- to provide input on pending conservation legislation and policy

For more information, go to www.WTCAC.org

Significant Opportunities in Atmospheric Research and Science (SOARS)

SOARS protégés spend ten weeks during the summer conducting original research at the National Center for Atmospheric Research (NCAR) or with other SOARS sponsors. By the end of the summer, protégés will prepare scientific papers and present their research at a colloquium. For more information, go to www.soars.ucar.edu

USDA-NRCS Golden Meadow Plant Materials Center

The Golden Meadow Plant Materials Center in Galliano, Louisiana, is a leader in coastal wetland ecosystem restoration. The Center develops plants and procedures to reverse the loss of coastal wetlands in the service areas of Louisiana, Mississippi, and Texas. The PMC is located within the Barataria–Terrebonne Estuary, one of the largest and most productive estuarine systems in the United States. Plants developed by the Center for coastal wetland remediation, restoration, and enhancement have proven effective in converting open water to new marsh. These marshes reduce soil erosion and promote reestablishment of emergent and submerged aquatic vegetation. The Golden Meadow Plant Materials Center has developed eight conservation plants for ecosystem restoration across the northern Gulf Coast.

For more information, go to http://plant-materials.nrcs.usda.gov/lapmc/

Appendix C: Participant List (throughout the week-long activities)

Bennie Ancar, Grand Bayou community

Geraldine Ancar, Grand Bayou community

Ruby Ancar, Grand Bayou community

Kelly Bagwell, Isle de Jean Charles community

Andrew Barron, Barataria-Terrebonne National Estuary Program

Mary Bartholomew, Grand Bayou community

Mitchell Bartholomew, Grand Bayou community

Brenda Billiot, Pointe-au-Chien Indian Tribe

Earl Billiot, Pointe-au-Chien Indian Tribe

John Boatman, US Department of Agriculture - Louisiana Natural Resources Conservation Service

Dereka Carroll, Dallas, Texas

Nikki Crowe, Fond du Lac Band of Lake Superior Chippewa

Donald Dardar, Pointe-au-Chien Indian Tribe

Russell Dardar, Pointe-au-Chien Indian Tribe

Theresa Dardar, Pointe-au-Chien Indian Tribe

Scott Denning, Colorado State University

Jonathan Foret, South Louisiana Wetlands Discovery Center

Marlene Foret, Grand Caillou/Dulac community

Randy Gilbertson, Wisconsin Tribal Conservation Advisory Council

Rebecca Haacker-Santos, Significant Opportunities in Atmospheric Research and Science/University Corporation for Atmospheric Research

Katharine Jacobs, National Climate Assessment, Office of Science and Technology Policy

Alton James, Jr., US Department of Agriculture-Louisiana Natural Resources Conservation Service

Randolph Joseph Jr., Louisiana US Department of Agriculture

Richard Krajeski, Natural Hazards Mitigation Association

Shirley Laska, University of New Orleans-Center for Hazard Assessment, Response and Technology

Heather Lazrus, University Corporation for Atmospheric Research

Maxie Machado, Grand Bayou community

Nancy Machado, Grand Bayou community

Sandra Maina, Florida Institute of Technology

Julie Maldonado, American University

Philip Maldonado, Virginia Tech

Albert Naguin, Isle de Jean Charles community

Rajul Pandya, Significant Opportunities in Atmospheric Research and Science/University Corporation for Atmospheric Research

Shirell Parfait-Dardar, Grand Caillou/Dulac community

Randy Peppler, University of Oklahoma

Kristina Peterson, University of New Orleans-Center for Hazard Assessment, Response and Technology

Danny Dean Philippe, Grand Bayou community

Karen Philippe, Grand Bayou community

Mark Philippe, Grand Bayou community

Maurice Philippe, Grand Bayou community

Rosina Philippe, Grand Bayou community

Evan Ponder, University of New Orleans-Center for Hazard Assessment, Response and Technology

Betty Reyes, Grand Bayou community

David Reyes, Grand Bayou community

Raymond Reyes, Grand Bayou community

Theresa Reyes, Grand Bayou community

Frances Roberts-Gregory, Spelman College

Melanie Sand, University of New Orleans-Center for Hazard Assessment, Response and Technology

Valerie Sloan, UNAVCO, Colorado

Jerry Thompson, Wisconsin Tribal Conservation Advisory Council